CLAIMS

[c1] 1. A method in a switch for transmitting frames to a network manager, the method comprising:

receiving a frame having a destination virtual address; and

upon receiving the frame,

determining whether the destination virtual address of the frame is reserved;

when the destination virtual address of the frame is reserved,

determining whether another virtual address of the frame maps to a port of the switch;

when the other virtual address of the frame maps to a port of the switch, transmitting the frame via the mapped-to port; and

when the other virtual address of the frame does not map to a port of the switch, transmitting the frame to the network manager.

[c2] 2. The method of claim 1 wherein the destination virtual address and the other virtual address are stored in a header of the frame.

[c3] 3. The method of claim 1 wherein the determining of whether another virtual address of the frame maps to a port of a switch includes checking a mapping of virtual addresses to ports.

[c4] 4. The method of claim 3 wherein each port of the switch has its own mapping.

[c5] 5. The method of claim 1 wherein the transmitting of the frame via the mapped-to port transmits the frame to the network manager.

[c6] 6. The method of claim 1 wherein the mapped-to port transmits the frame via in-band communications.

[c7] 7. The method of claim 1 wherein the network manager transmits the frame via out-of-band communications.

[c8] 8. The method of claim 1 wherein the network manager is distributed to devices connected to switches and the network manager transmits the frame via an out-of-band communications to a device connected to the switch.

[c9] 9. The method of claim 1 wherein the network manager is centralized and the frame is transmitted to the network manager via in-band communications.

[c10] 10. A method in a routing device for transmitting frames to a network manager, the method comprising:

receiving a frame having a virtual address; and

determining whether the virtual address of the frame is reserved;

when the virtual address of the frame is reserved, providing the frame to the network manager;

when the virtual address of the frame is not reserved, transmitting the frame via a port of the routing device based on a mapping of virtual addresses to ports.

[c11] 11. The method of claim 10 wherein the providing of the frame to the network manager includes:

determining whether another virtual address of the frame maps to a port of the routing device,

when the other virtual address of the frame maps to a port of the routing device, transmitting the frame via the mapped-to port; and

when the other virtual address of the frame does not map to a port of the switch, transmitting the frame directly to the network manager.

[c12] 12. The method of claim 11 wherein the virtual address and the other virtual address are stored in a header of the frame.

[c13] 13. The method of claim 11 wherein the determining of whether another virtual address of the frame maps to a port of the routing device includes checking a mapping of virtual addresses to ports.

[c14] 14. The method of claim 13 wherein each port of the routing device has its own mapping.

[c15] 15. The method of claim 10 the routing device is a switch.

[c16] 16. The method of claim 10 wherein the providing of the frame to the network manager transmits the frame via out-of-band communications.

[c17] 17. The method of claim 10 wherein the network manager is distributed to devices connected to routing devices and the providing of the frame to the network manager transmits the frame via out-of-band communications to a device connected to the routing device.

[c18] 18. A routing device for transmitting data to a network manager, comprising:

a component that receives data having a virtual address; and

a component that, when the virtual address of the data is reserved,

provides the data to the network manager and that, when the virtual

address is not reserved, transmits the data via a port of the routing device based on a mapping of virtual addresses to ports.

[c19] 19. The routing device of claim 18 wherein the providing of the data to the network manager includes:

a component that, when the other virtual address of the data maps to a port of the routing device, transmits the data via the mapped-to port and, when the other virtual address does not map to a port of the routing device, transmits the frame directly to the network manager.

[c20] 20. The routing device of claim 19 wherein the virtual address and the other virtual address are stored in a header of the data.

[c21] 21. The routing device of claim 20 wherein each port of the routing device has its own mapping.

[c22] 22. The routing device of claim 18 the routing device is a switch.

[c23] 23. The routing device of claim 18 wherein the providing of the data to the network manager transmits the data via out-of-band communications.

[c24] 24. The routing device of claim 18 wherein the network manager is distributed to devices connected to routing devices and the providing of the data to the network manager transmits the data via an out-of-band communications to a device connected to the routing device.

[c25] 25. A switch for transmitting data to a network manager, comprising:

means for receiving data having a virtual address; and

means for providing the data to the network manager when the virtual address of the data is reserved and for transmitting the data via a

port of the routing device based on a mapping of virtual addresses to ports when the virtual address of the data is not reserved.

[c26] 26. The switch of claim 25 wherein the providing of the data to the network manager includes:

means for transmitting the data via a mapped-to port when the virtual address of the data maps to a port of the switch and for transmitting the data directly to the network manager when the other virtual address of the data does not map to a port of the switch.

[c27] 27. The switch of claim 25 wherein the virtual address and the other virtual address are stored in a header of the data.

[c28] 28. The switch of claim 27 wherein each port of the switch has its own mapping.

[c29] 29. The switch of claim 28 wherein the providing of the data to the network manager transmits the data via out-of-band communications.

[c30] 30. The switch of claim 25 wherein the network manager is distributed to devices connected to switches and the providing of the data to the network manager transmits the data via out-of-band communication to a device connected to the switch.